1974-79 FUEL SYSTEMS
Solex DIDTA & TDID 2-Barrel Carburetors

Audi: 1974 100 LS, Fox
BMW: 1974-76 2002
Opel: 1974 Manta, 1900
Volkswagen: 1974 Dasher

CARBURETOR IDENTIFICATION

CARBURETOR IDENTIFICATION NUMBERS

Application	Man. Trans.	Auto. Trans.
Audi	32/35 TDID	32/35 DIDTA
BMW	32/35 DIDTA	32/35 DIDTA
Opel	32 DIDTA	32 TDID
Volkswagen	32/35 DIDTA	32/35 DIDTA

DESCRIPTION

Carburetor is a downdraft, 2-barrel type. It incorporates an automatic choke and vacuum operated secondary. Carburetor assembly consists of throttle body, main body, and air horn. Diaphragm type accelerator is incorporated into primary barrel only.

ADJUSTMENTS

IDLE SPEED & MIXTURE

See appropriate TUNE-UP PROCEDURES article.

COLD (FAST) IDLE

See appropriate TUNE-UP PROCEDURES article.

FLOAT LEVEL

Audi - Remove carburetor air horn and place on a 45 degree base. *See Fig. 1.* Place Float Level Gauge (20-100) on air horn and check that pointed tips touch rim around float. If necessary, bend float hinge.

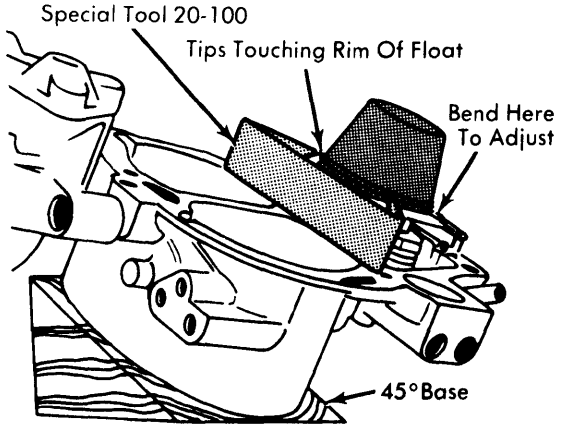

Fig. 1: Float Level Adjustment

CHOKE UNLOADER

Audi - Remove automatic choke cover. Use a screwdriver to press down on diaphragm pull-down rod until it contacts pin on choke control lever. Using a .131-.143" (3.33-3.63 mm) drill gauge, check gap between choke plate and air horn wall. *See Fig. 2.* If necessary, bend pin on choke control lever to adjust.

PRIMARY THROTTLE

Audi (Choke Open) - 1) With carburetor removed and inverted, loosen lock nut and back out screw until it is free (with throttle valve lever closed). *See Fig. 3.*

2) Use light pressure to hold throttle valve lever closed. Using depth gauge, measure distance from throttle body surface to outer edge of primary throttle valve.

3) Turn adjustment screw until depth of throttle valve is less than initial depth measured. On vehicles with air pumps, difference should be .036" (.9 mm) less. On vehicles without air pumps, difference should be .016" (.4 mm) less. Tighten lock nut after adjustment.

Audi & Dasher (Choke Closed) - 1) With carburetor removed and inverted, close choke valve and measure primary throttle-to-bore clearance. *See Fig. 3.* Clearance should be .027-.030" (.69-.76 mm). If necessary, bend choke connecting rod to set throttle gap to proper specification.

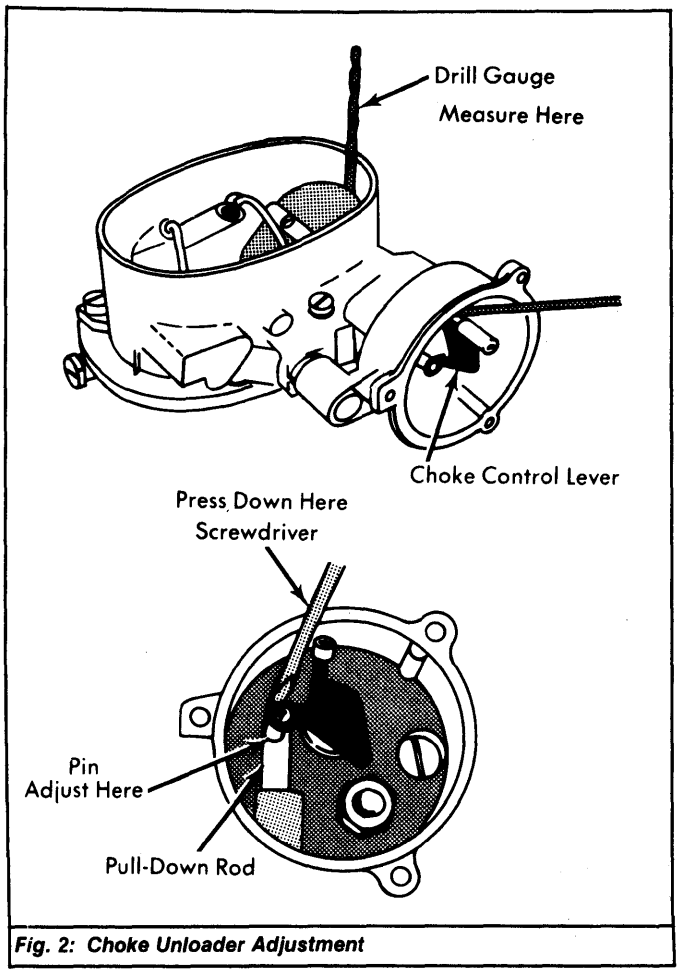

Fig. 2: Choke Unloader Adjustment

SECONDARY THROTTLE

Audi, Dasher & Opel - Remove carburetor and inverted on work bench. Close choke and loosen lock nut on secondary throttle stop screw. Back off adjustment screw until it is free. Turn screw in until it just touches stop, then turn an additional 1/2 turn (1/4 turn on Opel). *See Fig. 4.* Tighten lock nut after adjustment.

VENT VALVE

Opel - With throttle valve closed, check that lower vent valve spring is compressed 1/4". To determine this, measure distance between vent valve lever and washer on end of operating rod. If adjustment is necessary, bend vent valve lever to obtain specified clearance.

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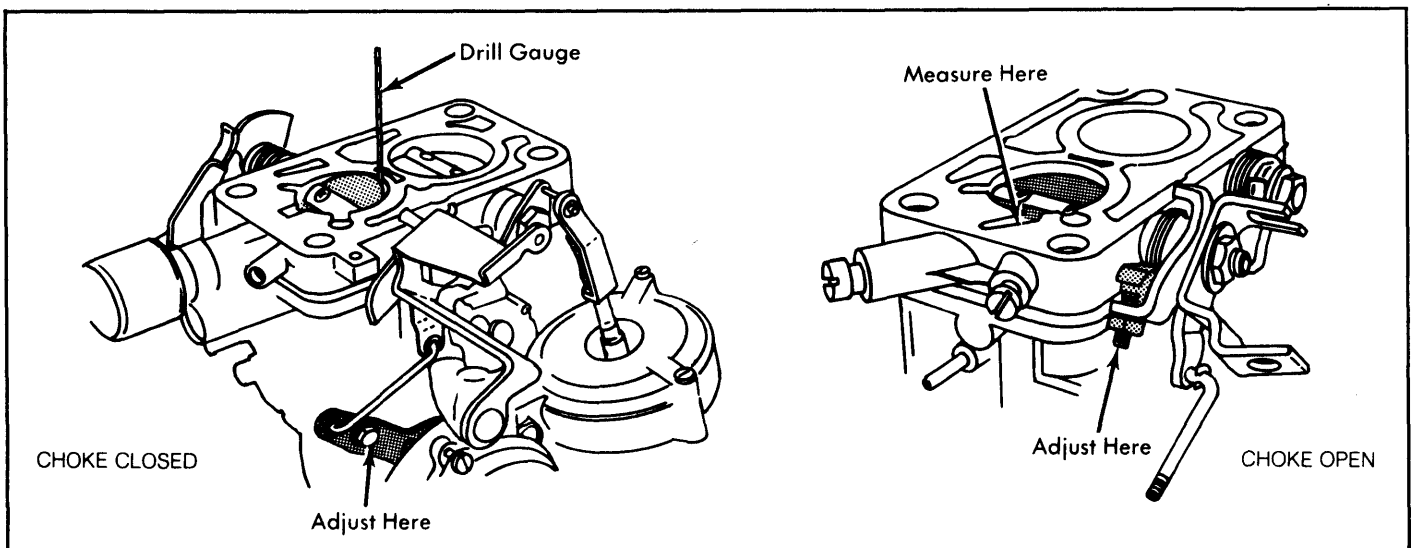

Fig. 3: Primary Throttle Adjustment

ACCELERATOR PUMP

Audi & BMW - Run engine to ensure fuel bowl is full. Attach length of rubber hose to accelerator pump discharge nozzle. Place loose end of hose in calibrated container.

2) While holding choke open, slowly accelerate throttle 10 times. Divide quantity of fuel by 10, to determine quantity per stroke. If quantity per stroke is not 1 cc, loosen lock screw on bellcrank and adjust inside lever. *See Fig. 5.*

Opel - 1) Accelerator pump discharge nozzle should discharge fuel against lower part of primary venturi. If aim of nozzle is incorrect, use needle-nose pliers to slightly bend nozzle until proper aim is achieved.

2) With choke open and throttle plate completely closed, no clearance should exist between pump operating lever and pump plunger rod. If clearance is present, loosen 4 pump cover screws and allow diaphragm spring to push plunger against lever so that zero clearance exists. Retighten pump cover screws.

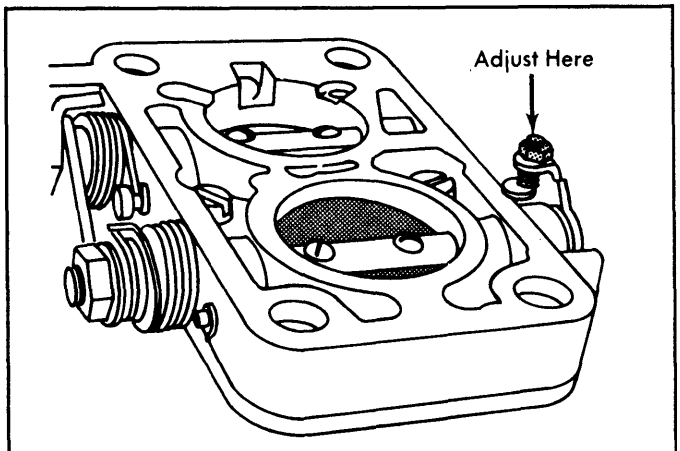

Fig. 4: Secondary Throttle Adjustment

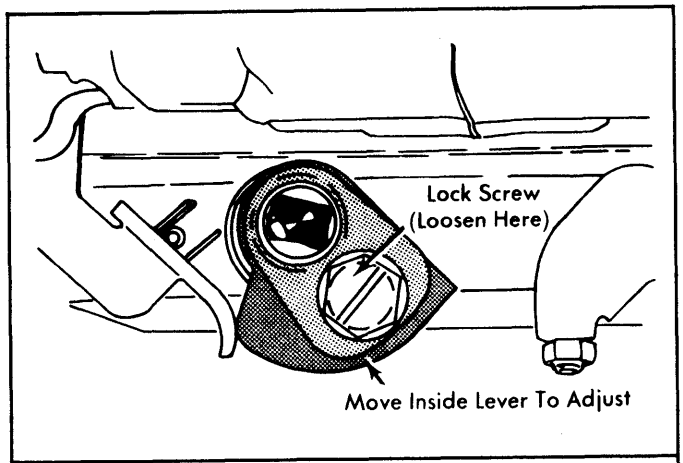

Fig. 5: Accelerator Pump Adjustment

OVERHAUL

DISASSEMBLY

1) Remove outer nut from end of throttle lever to choke link. Pry off vacuum case connecting lever and unscrew carburetor cover. Screw float needle valve out of carburetor cover and take off copper seal ring.

2) Remove vacuum diaphragm cover and enrichment system cover. Unscrew retaining ring from automatic choke body. Unscrew vacuum diaphragm case from carburetor cover and remove reduction jet.

3) Remove accelerator pump discharge nozzle assembly. Nozzle assembly is press fit. Remove float together with spindle and leaf spring. Remove primary idle jets, secondary high speed air jets, and primary and secondary main metering jets.

4) Remove cotter pin from pump connecting rod, and remove accelerator pump. Remove idle mixture adjusting screw from throttle valve body, and remove idle air adjusting screw from float chamber.

REASSEMBLY

To reassemble, reverse disassembly procedure. *See Fig. 6.*

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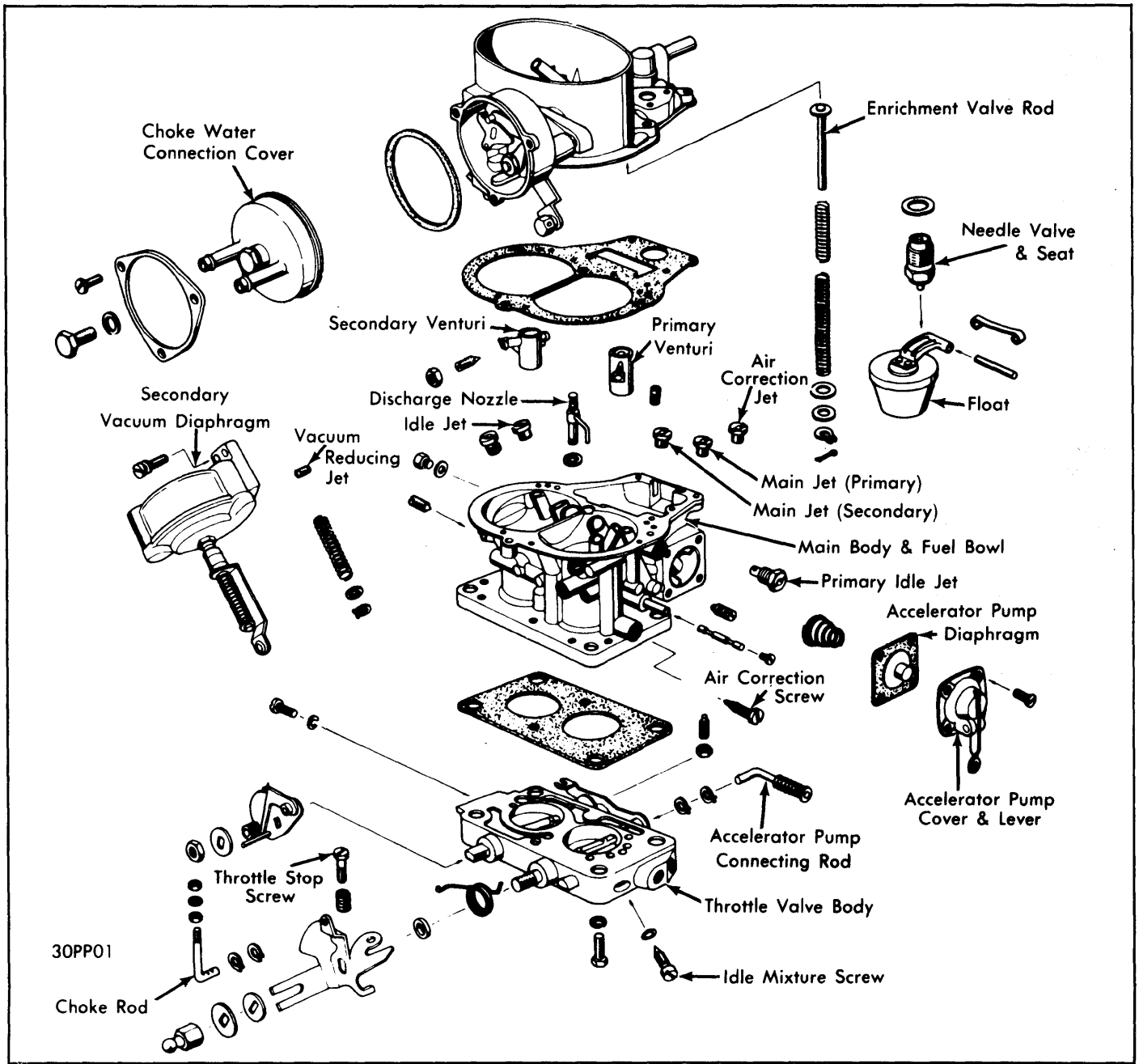

Fig. 6: Exploded View of Solex DIDTA & TDID 2-Barrel Carburetors

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1974 CARBURETOR ADJUSTMENT SPECIFICATIONS

Car Model	Idle RPM		Fuel Level	Choke Unloader	Fast Idle Linkage	Accelerator Pump Stroke
	Hot	Fast	In. (mm)	In. (mm)	In. (mm)	
Audi	850-1000	2200	① .61-.69 (15.5-17.5)	.126 (3.2)	.025 (.65)	.9±.15cc
BMW	700-900	2300	① .70 (17.9)	.259 (6.6)	.025 (.65)	2.0±.15cc
Opel	700-800	3250	.....	.....	.....	.....
Volkswagen	900-1000	.....	.....	.....	.025 (.65)	.9±.15cc

① — In center of sight glass. See adjustment procedure.

1975 CARBURETOR ADJUSTMENT SPECIFICATIONS

Car Model	Idle RPM		Fuel Level	Choke Unloader	Fast Idle Linkage	Accelerator Pump Stroke
	Hot	Fast	In. (mm)	In. (mm)	In. (mm)	
BMW	700-900	2300	.70 (17.9)	.259 (6.6)	.025 (.65)	2.0±.15cc

1976 CARBURETOR ADJUSTMENT SPECIFICATIONS

Car Model	Idle RPM		Fuel Level	Choke Unloader	Fast Idle Linkage	Accelerator Pump Stroke
	Hot	Fast	In. (mm)	In. (mm)	In. (mm)	
BMW	700-900	2300	.70 (17.9)	.259 (6.6)	.025 (.65)	2.0±.15cc